**Options**
**ID:** tx_ofdm
**Title:** OFDM Tx
**Description:** Examp...nsmitter
**Output Language:** Python
**Generate Options:** QT GUI

**Complexity: 892ubal**

**Variable**
**ID:** fft_len
**Value:** 64

**Variable**
**ID:** length_tag_key
**Value:** packet_len

**Variable**
**ID:** sync_word1
**Value:** [0., 0., 0., 0., 0....

**Variable**
**ID:** sync_word2
**Value:** [0, 0, 0, 0, 0, 0, ...

**Variable**
**ID:** packet_len
**Value:** 64

**Variable**
**ID:** header_mod
**Value:** <gnuradi...168472ebf0

**Variable**
**ID:** payload_mod
**Value:** <gnuradi...168472be70>

**Variable**
**ID:** rolloff
**Value:** 0

**Variable**
**ID:** occupied_carriers
**Value:** [-26, -2...24, 25, 26]

**Variable**
**ID:** pilot_carriers
**Value:** (-21, -7, 7, 21)

**Variable**
**ID:** pilot_symbols
**Value:** (1, 1, 1, -1)

**Variable**
**ID:** header_formatter
**Value:** <gnuradi...168472ec70>

**QT GUI Range**
**ID:** gain
**Default Value:** 700m
**Start:** 0
**Stop:** 1
**Step:** 10m

**QT GUI Range**
**ID:** center_freq
**Label:** Center Frequency
**Default Value:** 915M
**Start:** 70M
**Stop:** 6G
**Step:** 1M

**Variable**
**ID:** samp_rate
**Value:** 1M

**Variable**
**ID:** bandwidth
**Value:** 56M

**QT GUI Range**
**ID:** multiply
**Default Value:** 20m
**Start:** 0
**Stop:** 1
**Step:** 10m

**Random Source**
**ID:** analog_random_source_x_0
**Minimum:** 96
**Maximum:** 97
**Num Samples:** 1k
**Repeat:** Yes

**Stream to Tagged Stream**
**ID:** blocks_st...gged_stream_0
**Packet Length:** 64
**Length Tag Key:** packet_len

**Stream CRC32**
**ID:** digital_crc32_bb_0
**Mode:** Generate CRC
**Length tag name:** packet_len
**Packed:** Yes

**Packet Header Generator**
**ID:** digital_p...enerator_bb_0
**Formatter Object:** <g...249b0>
**Length Tag Name:** packet_len

**Virtual Sink**
**ID:** header_bits
**Stream ID:** Header Bits

**Repack Bits**
**ID:** blocks_repack_bits_bb_0
**Bits per input byte:** 8
**Bits per output byte:** 2

**Virtual Sink**
**ID:** virtual_sink_0_0
**Stream ID:** Payload Bits

**Virtual Source**
**ID:** virtual_source_0
**Stream ID:** Header Bits

**Virtual Source**
**ID:** virtual_source_0_0
**Stream ID:** Payload Bits

**Chunks to Symbols**
**ID:** digital_c..._symbols_xx_0
**Symbol Table:** -1, 1
**Dimension:** 1

**Chunks to Symbols**
**ID:** digital_c...ymbols_xx_0_0
**Symbol Table:** -1.4...1.41421j
**Dimension:** 1

**Tagged Stream Mux**
**ID:** blocks_ta..._stream_mux_0
**Length tag names:** packet_len

**Virtual Sink**
**ID:** virtual_sink_0_0_0
**Stream ID:** Pre-OFDM

**Virtual Source**
**ID:** virtual_source_0_0_0
**Stream ID:** Pre-OFDM

**OFDM Carrier Allocator**
**ID:** digital_o...locator_cvc_0
**FFT length:** 64
**Occupied Carriers:** [-..., 26]
**Pilot Carriers:** (-2... 7, 21)
**Pilot Symbols:** (1, 1, 1, -1)
**Sync Words:** [0.0,... 0, 0, 0]
**Length tag key:** packet_len
**Shift Output:** Yes

**FFT**
**ID:** fft_vxx_0
**FFT Size:** 64
**Forward/Reverse:** Reverse
**Window:**
**Shift:** Yes
**Num. Threads:** 1

**OFDM Cyclic Prefixer**
**ID:** digital_o...ic_prefixer_0
**FFT Length:** 64
**CP Length(s):** 16
**Length Tag Key:** packet_len

**Virtual Sink**
**ID:** virtual_sink_0
**Stream ID:** Time Domain

**Virtual Source**
**ID:** virtual_source_0_0_0_0
**Stream ID:** Time Domain

**Multiply Const**
**ID:** blocks_mu...y_const_vxx_0
**Constant:** 20m

**UHD: USRP Sink**
**ID:** uhd_usrp_sink_0
**Sync:** PC Clock
**Samp rate (Sps):** 1M
**Ch0: Center Freq (Hz):** 915M
**Ch0: Gain Value:** 700m
**Ch0: Gain Type:** Normalized
**Ch0: Antenna:** TX/RX
**Ch0: Bandwidth (Hz):** 56M

**Tag Gate**
**ID:** blocks_tag_gate_0
**Propagate Tags:** No
**Single Key:**

**Throttle**
**ID:** blocks_throttle_0
**Sample Rate:** 1M

**QT GUI Time Sink**
**ID:** qtgui_time_sink_x_0
**Name:** Scope Plot
**Number of Points:** 1.024k
**Sample Rate:** 1M
**Autoscale:** Yes

**QT GUI Frequency Sink**
**ID:** qtgui_freq_sink_x_0
**Name:** FFT Plot
**FFT Size:** 1.024k
**Center Frequency (Hz):** 0
**Bandwidth (Hz):** 1M